
Tigridia estelae (Iridaceae; Tigridieae), A New Species from Durango, Mexico

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ABSTRACT. *Tigridia estelae* sp. nov. from Durango, Mexico, is described and illustrated. It belongs to the *T. multiflora* complex and is closely related to *T. matudae*, from which it differs in the length of style branches, the position and blotching of the tepals, and in its habitat.

The genus *Tigridia* Jussieu is represented in Mexico by at least 27 species, 21 of which are endemic (Cruden, 1975; Molseed, 1970; Calderón de Rzedowski, 1987) and restricted to very small areas. More intensive exploration will probably lead to the discovery of undescribed taxa. While collecting for a study of Mexican monocots in the State of Durango, specimens of a *Tigridia* were gathered, and review of the pertinent literature led us to conclude that it is a new species.

***Tigridia estelae* López-Ferrari & Espejo, sp. nov.**

TYPE: Mexico. Durango: El Madroño, carretera El Salto-Mazatlán, 2,350 m, bosque de pino-encino, 29 jul. 1991, *A. R. López-Ferrari 1520*, with *A. Espejo & M. Flores C.* (holotype, UAMIZ 32934; isotypes, CIDIIR, ENCB, IBUG, IEB, K, MO). Figures 1, 2.

Herba perennis erecta bulbosa, caules usque 40 cm alti, folia basalia 1, linearia, usque ad 35 cm longa et 5 mm lata; folia caulinea 2, linearia, usque ad 18 cm longa et 5 mm lata; spathae valvae subaequales ca. 4.5 cm longae, 1.2–1.4 cm latae, conduplicatae, acutae vel acuminatae; flores plures, erecti, pallide lavendulacei vel liliaci-lavandulacei, 5.5–6.5 cm diametro; tepala conniventia et ad basim cupulam formantia, ad partem crateriformem straminea et violaceo guttata, ad partem mediam purpureo maculata; tepala externa elliptica ubi extensa, acuta, 3.3–4.1 cm longa, 1.5–2 cm lata; tepala interna ovata vel triangula ubi extensa, apiculata, ad basim unguiculata, 2.3–2.5 cm longa, 1.5–1.7 cm lata; glans ad tepalorum partem mediam posita, semicircularis; filamenta connata, ca. 1 cm longa; antherae oblongae, 8–10 mm longae; styli ramuli 8–9 mm longi, bipartiti, violacei; Julii usque Augustii florescet.

Erect bulbous perennial herb to 40 cm tall, glabrous; bulb ovoid to large ovoid, to 4 cm long, 1.3–2 cm broad, the scales thin, pale brown; basal leaf

one, linear, plicate, to 35 cm long, 5 mm broad, cauline leaves two, linear, plicate, to 18 cm long, 5 mm broad; flowering stem to 35 cm tall; inflorescence a rhipidium with the spathe valves subequal, ca. 4.5 cm long, 1.2–1.4 cm broad, conduplicate, acute to acuminate, enclosing several flowers. Flowers erect, lavender to lilac, 5.5–6.5 cm diam., the tepals connivent at the base forming a shallow cup, spreading distally, the base dull yellow with violet spots, the middle part with a violet blotch, outer tepals elliptic when extended, acute, 3.3–4.1 cm long, 1.5–2 cm broad, inner tepals ovate to deltoid when extended, apiculate, unguiculate at the base, 2.3–2.5 cm long, 1.5–1.7 cm broad, glands disposed at middle part of the inner tepals, semicircular; filaments connate for ca. 1 cm, anthers oblong, 8–10 mm long; ovary oblong, ca. 7 × 2.5–3 mm, style branches 8–9 mm long, deeply bifid into 2 style arms, violet; young capsules oblong, ca. 1.2 cm long, 3.5 mm broad, mature capsules and seeds not known.

Distribution and habitat. This beautiful species is known only from the type locality and occurs on exposed rocky slopes in forests of *Quercus* and *Pinus* at about 2,350 m (Fig. 3).

Discussion. The new species belongs to *Tigridia* subg. *Hydrotænia* (sensu Molseed, 1970) and to the *T. multiflora* complex, which includes *T. purpusii* Molseed, *T. multiflora* (Baker) Ravenna, *T. matudae* Molseed, *T. illecebrosa* Cruden, *T. catarinensis* Cruden, and *T. huajuapense* Molseed ex Cruden (Cruden, 1975; Molseed, 1970). In these species (except *T. huajuapense*) the inner tepals have a well-developed claw and hastate base. Table 1 presents some comparative characteristics that distinguish the species. The species most closely related to *T. estelae* is apparently *T. matudae*, which has style branches one-third to one-half the length of the anthers and the outer tepals apically upturned; in *T. estelae* the style branches are subequal to the anthers and the tepals are spreading (Fig. 1). Moreover, *T. matudae* grows in extremely shady, wooded

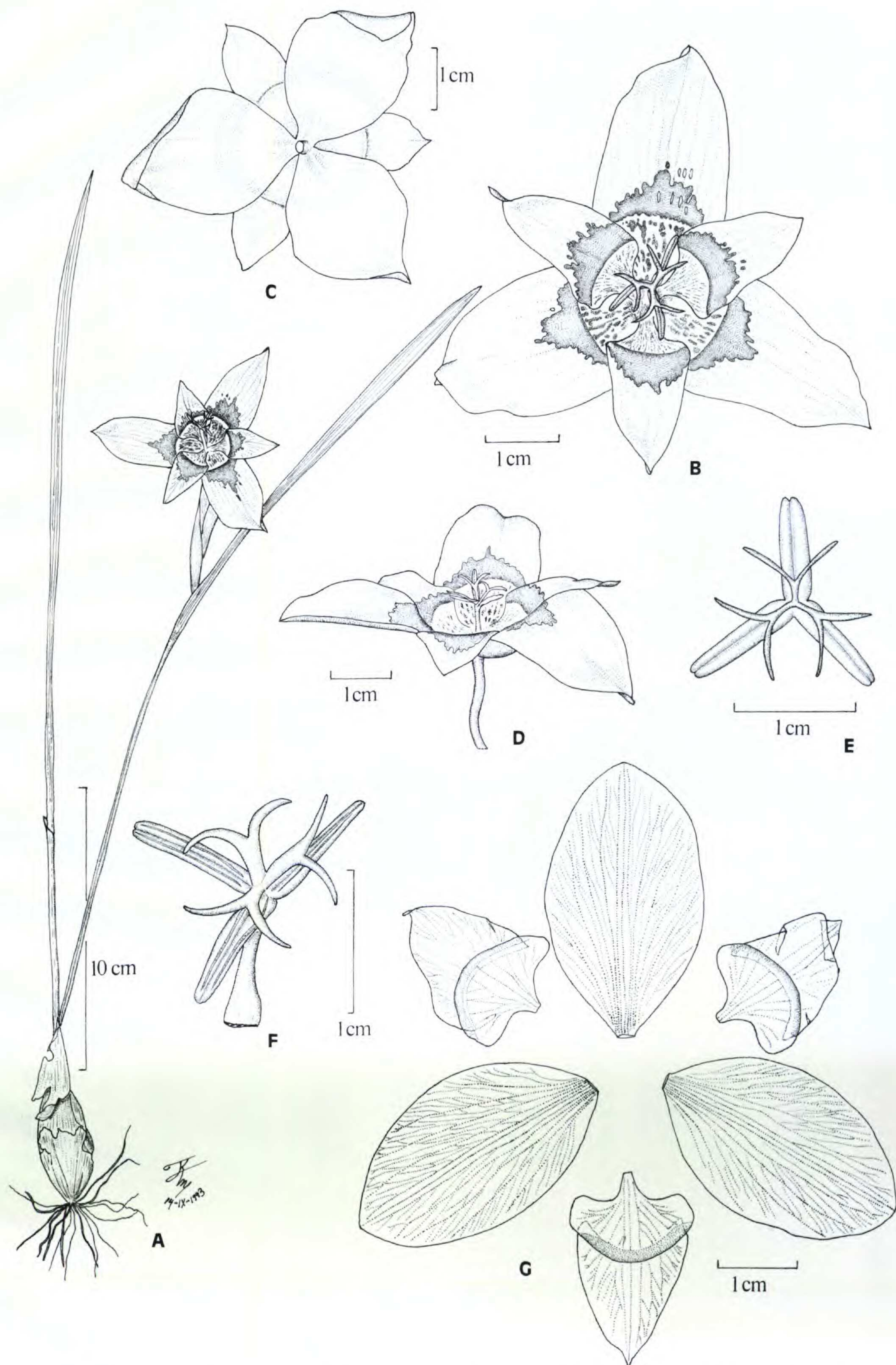


Figure 1. *Tigridia estelae* López-Ferrari & Espejo. —A. Habit of plant at anthesis. —B. Flower, frontal view. —C. Flower, back view. —D. Lateral view. —E, F. Detail of stamens and style. —G. Flower, dissected.

**A****B**

Figure 2. *Tigridia estelae* López-Ferrari & Espejo. —A. Habit of plant at anthesis. —B. Flower, frontal view.

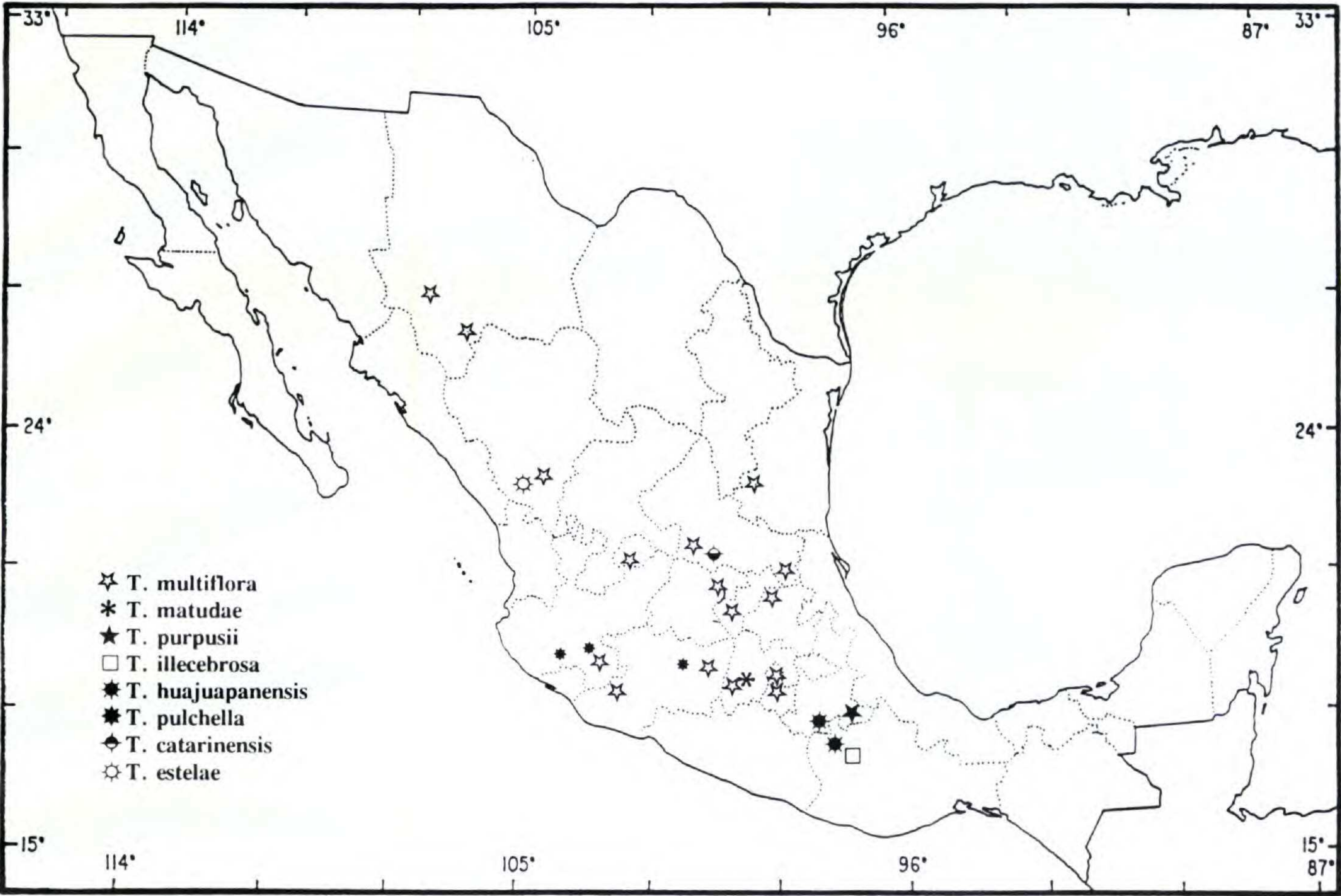


Figure 3. Map showing the distribution of *Tigridia estelae* and its allies.

TABLE 1. Comparative data of some characters of *Tigridia estelae* and its allies.

Species	Height (in cm)	Num- ber of cauline leaves	Num- ber of basal leaves	Flower orien- tation	Flower color	Capsule form	Distribution (Fig. 3)
<i>T. multiflora</i> (Baker) Ravenna	60	1-2	1-4	erect	purple, purple- brown to rusty laven- der orange	clavate	Central and Northern Mex- ico
<i>T. matudae</i> Molseed	60-85	2	0	erect	light blue vio- let	oblong-clavate	Edo. de México
<i>T. purpusii</i> Molseed	70	2 or more	1	erect	violet	subglobose	Puebla
<i>T. illecebrosa</i> Cruden	95	3	0	cernuous	tan with ma- roon streaks	obovate to cla- vate	Oaxaca
<i>T. huajuapanensis</i> Molseed ex Cruden	15-45	1	2-3	erect	purple brown with yellow- ish streaks	subglobose	Oaxaca, Puebla
<i>T. pulchella</i> , B. L. Robinson	to 40	1	1	erect	red maroon with white	oblong-clavate	Michoacán, Jalis- co
<i>T. catarinensis</i> , Cru- den	50-150	2	1-2	erect	maroon with yellow	broadly ovate	San Luis Potosí
<i>T. estelae</i> Lopez- Ferrari & Espejo	to 40	2	1	erect	lavender to lilac	oblong	Durango

situations and *T. estelae* prefers open, exposed habitats.

The name of the species honors María Estela Ferrari de López, mother of the senior author.

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